

Bay Trading Area
Services Opportunity Analysis

Prepared for
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Final Report

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Outline

- I. Study Objectives
- II. Methodology
- III. Summary Conclusions
- IV. Respondent Demographics
- V. Findings
- VI. Recommendations

Appendixes

- A. Questionnaire
- B. Definitions



I. Study Objectives/Scope

- Determine systems software support requirement
- Identify propensity to buy outside
- Estimate market size for services under study
- Segment market based on field research
- Identify high-potential offerings

Scope

- San Francisco Bay Trading Area
- IBM's existing customer base
- AS/400 and above
- Systems programming-related services (problem management and infrastructure migration)

II. Methodology

- Jointly designed questionnaire (see appendix)
- Field research—telephone interviews (sample size = 80)
- Analysis of field data
 - Market segments
 - High-potential offerings
 - User requirements
 - Market sizing



III. Summary Conclusions

- Interest in going outside for this class of services *lower* than anticipated
 - About 40% of respondents prefer in-house solutions
 - Survey results do indicate potential targets within the specific service areas
- Respondents much more receptive to using outside suppliers for management of “areas of activity”—in effect, collections or groupings of specific targeted service offerings
- IBM considered viable but perhaps expensive supplier
- Interest in specific services seems greater in AS/400 shops as compared to MVS/VM organizations
- Strong interest in services related to the deployment of newer or unfamiliar technologies
- Packaging specific service items into groupings that address general problems, and selling with a “consulting” approach, are key to market success.



IV. Respondent Demographics—Summary

- Sample size = 80
- 61% characterized as oriented toward the use of outside services
- Four companies already outsourcing significant parts of their operation
- 70% declined to specify total IS budget
- Respondents—management or executive level (80%)
- 60% of respondents have at least 2 IBM architectures installed; 40%—head of IS department
- MVS and AS/400 dominate



Respondent Demographics Company Size

Revenue	Total Sample Respondents (%)	Users of Outside Services Respondents (%)
Less than 50M	22	16
50 - 100M	10	11
101 - 500M	40	47
More than 500M	28	26
	100	100



Respondent Demographics Industries Represented

Industry	Total Number of Respondents	Users of Outside Services
Discrete Mfg.	5	2
Process Mfg.	16	10
Transportation	3	2
Utilities	3	3
Communications	2	1
Retail	9	5
Wholesale	1	1
Banking/Finance	7	4
Insurance	6	3
Medical	1	1
Services	15	9
Education	2	2
State/Local Govt.	5	4
Other	2	1

Respondent Demographics User or Provider of IS

	Total (Percent)	Users of Outside Services (Percent)
User	29	26
Provider	64	66
Both	7	8
	100	100

Respondent Demographics

Title of Respondent

Respondent Title	Number of Respondents	Percent of Sample
VP/Dir./Mgr. - IS	31	41
Dir./Mgr. Applications	5	6
Dir./Mgr. Operations	23	29
Systems Programming	6	7
Controller/Accounting	5	6
Other (Info. Ctr., Education, Admin., Other)	9	11
	79	100



Respondent Demographics Dominant IBM Architecture

	Total (Percent)	Users of Outside Services (Percent)
MVS/VM	46	47
VSE	13	10
AS/400	26	29
Other	15	14
	100	100

Sample = 80



Respondent Demographics

Number of IBM Architectures Installed

Number of Architectures	Number of Respondents	Percent
1	34	42
2	29	36
3	16	20
4	1	2
	80	100

V. Findings

- Total Sample
 - Consulting and education
 - Operational management services
 - Interest in specific services
- By Company Size
 - Consulting and education
 - Operational management services
- Providers of IS
 - Consulting and education
- MVS/VM, VSE and AS/400 as Dominant Architectures
 - Consulting and education
 - Operational management services
 - Interest in specific services
- MVS/VM as Dominant Architecture
 - Consulting and education
 - Operational management services
 - Interest in specific services
- VSE as Dominant Architecture
 - Consulting and education
 - Operational management services
 - Interest in specific services
- AS/400 as Dominant Architecture
 - Consulting and education
 - Operational management services
 - Interest in specific services
- Other as Dominant Architecture
 - Consulting and education
 - Operational management services
 - Interest in specific services
- Technology Deployment
- Market Size



Likelihood to Engage Outside Firms for Consulting and Education Services

	Total Sample		Users of Outside Services	
	Any Supplier	IBM as Supplier	Any Supplier	IBM as Supplier
Organizational Consulting	2.0	2.1	2.2	2.4
Systems Operational Assessments	2.2	2.3	2.5	2.6
Educational Services	3.5	3.2	3.5	3.3

Rating—1 to 5: 1 = Very Unlikely, 5 = Very Likely

Sample = 80

Operational Management Services—Total Sample

General Types of Services	Number Mentioned	Would Go Outside (%)
Tuning systems performance	17	74
Updating to new systems software releases	6	67
Installing new systems software	7	43
Simplifying operations	8	63
Verifying current environmental capabilities	4	75
Improving systems availability	1	0

Operational Management Services Users of Outside Services

General Types of Services	Number Mentioned	Would Go Outside (%)
Tuning systems performance	31	48
Updating to new systems software releases	11	45
Installing new systems software	11	36
Simplifying operations	12	42
Verifying current environmental capabilities	6	50
Improving systems availability	3	33
All of the above	9	44
None	7	-

Sample = 49



Interest in Specific Services Total Sample

Service Area	Mean Interest		
	Planning	Imple- mentation	IBM as Provider
Installation of systems software	1.7	1.7	1.7
Systems software maintenance	1.8	1.9	1.9
Problem management	2.0	1.9	2.0
Change management	1.8	1.8	1.9
Configuration management	2.0	1.9	1.9
System availability management	1.8	1.8	1.9
Performance management	2.2	2.2	2.2
Capacity planning	2.2	2.3	2.1
Storage management	1.8	1.9	1.8
Systems security management	1.8	1.8	1.8
Operations automation	2.1	2.1	2.1
System workload consolidation	1.9	1.9	2.0

Sample = 80

Rating—1 to 5: 1 = Very Unlikely, 5 = Very Likely

Interest in Specific Services Users of Outside Services

Service Area	Mean Interest		
	Planning	Imple- mentation	IBM as Provider
Installation of systems software	1.9	1.9	2.0
Systems software maintenance	2.2	2.3	2.2
Problem management	2.2	2.2	2.4
Change management	2.1	2.1	2.2
Configuration management	2.3	2.3	2.3
System availability management	2.0	2.1	2.3
Performance management	2.5	2.6	2.6
Capacity planning	2.5	2.7	2.4
Storage management	2.0	2.2	2.2
Systems security management	2.0	2.1	2.2
Operations automation	2.4	2.5	2.7
System workload consolidation	2.2	2.2	2.5

Sample = 49

Rating—1 to 5: 1 = Very Unlikely, 5 = Very Likely



Specific Services—Potential Targets Users of Outside Services, Responding 3, 4, or 5

Service Area	Frequency		
	Planning	Imple- mentation	IBM as Provider
Installation of systems software	14	16	16
Systems software maintenance	16	17	19
Problem management	18	18	23
Change management	12	16	18
Configuration management	17	18	19
System availability management	14	14	19
Performance management	22	25	26
Capacity planning	24	26	23
Storage management	15	17	17
Systems security management	14	17	18
Operations automation	22	24	27
System workload consolidation	21	22	23

Sample = 49



Likelihood to Engage Outside Firms for Consulting and Education Companies Over \$100 Million

	Sample		Users of Outside Services	
	Any Supplier	IBM as Supplier	Any Supplier	IBM as Supplier
Organizational Consulting	2.0	2.0	2.3	2.2
Systems Operational Assessments	2.2	2.0	2.6	2.2
Educational Services	3.5	2.9	3.6	3.0

Sample = 43

Operational Management Services Companies Over \$100 Million

General Types of Services	Number Mentioned	Would Go Outside (%)
Tuning systems performance	18	33
Updating to new systems	3	33
Installing new systems software	5	20
Simplifying operations	8	38
Verifying current environmental capabilities	3	33
Improving systems availability	1	0

Sample = 43



Likelihood to Engage Outside Firms for Consulting and Education Companies Under \$100 Million

	Sample		Users of Outside Services	
	Any Supplier	IBM as Supplier	Any Supplier	IBM as Supplier
Organizational Consulting	1.7	2.0	2.0	2.7
Systems Operational Assessments	2.3	2.5	2.8	3.2
Educational Services	3.6	3.7	3.0	3.8

Sample = 20

Sample = 10



Operational Management Services Companies Under \$100 Million

General Types of Services	Number Mentioned	Would Go Outside (%)
Tuning systems performance	8	63
Updating to new systems	4	50
Installing new systems software	3	33
Simplifying operations	2	50
Verifying current environmental capabilities	1	0
Improving systems availability	2	50

Sample = 20



Likelihood to Engage Outside Firms for Consulting and Education Providers of IS

	Sample		Users of Outside Services	
	Any Supplier	IBM as Supplier	Any Supplier	IBM as Supplier
Organizational Consulting	2.0	2.3	2.1	2.5
Systems Operational Assessments	2.3	2.4	2.4	2.6
Educational Services	3.6	3.4	3.5	3.4

Sample = 51

Sample = 34



Likelihood to Engage Outside Firms for Consulting and Education MVS, VM, VSE, AS/400 Dominant Architecture

	Sample		Users of Outside Services	
	Any Supplier	IBM as Supplier	Any Supplier	IBM as Supplier
Organizational Consulting	2.0	2.1	2.2	2.4
Systems Operational Assessments	2.2	2.2	2.5	2.6
Educational Services	3.6	3.3	3.6	3.4

Sample = 68

Sample = 42



Operational Management Services MVS, VM, VSE, AS/400 Dominant Architecture

General Types of Services	Number Mentioned	Would Go Outside (%)
Tuning systems performance	27	52
Updating to new systems	10	40
Installing new systems software	11	36
Simplifying operations	10	40
Verifying current environmental capabilities	6	50
Improving systems availability	2	50

Sample = 68



Interest in Outside Help for Support Services MVS, VM, VSE, AS/400 Dominant Architecture

Service Area	Mean Interest		
	Planning	Implementation	IBM as Provider
Installing systems software	1.7	1.6	1.8
Systems software maintenance	1.8	1.7	1.9
Problem management	2.0	1.9	2.0
Change management	1.7	1.7	1.9
Configuration management	1.9	1.9	1.9
System availability management	1.7	1.7	1.9
Performance management	2.2	2.2	2.2
Capacity planning	2.3	2.2	2.1
Storage management	1.8	1.8	1.8
Systems security management	1.8	1.8	1.8
Operations automation	2.1	2.1	2.2
System workload consolidation	1.9	1.9	2.0

Sample = 68



Interest in Outside Help for Support Services MVS, VM, VSE, AS/400 Dominant Architecture Users of Outside Services

Service Area	Mean Interest		
	Planning	Imple- mentation	IBM as Provider
Installing systems software	1.9	1.9	2.0
Systems software maintenance	2.0	2.0	2.2
Problem management	2.2	2.2	2.4
Change management	1.9	2.0	2.2
Configuration management	2.2	2.2	2.3
System availability management	1.9	2.0	2.2
Performance management	2.6	2.6	2.6
Capacity planning	2.5	2.6	2.5
Storage management	1.9	2.0	2.1
Systems security management	2.0	2.0	2.2
Operations automation	2.4	2.5	2.8
System workload consolidation	2.1	2.1	2.5

Sample = 42

Interest in Outside Help for Support Services MVS, VM, VSE, AS/400 Dominant Architecture Users of Outside Services

Service Area	Frequency of 3/4/5		
	Planning	Imple- mentation	IBM as Provider
Installing systems software	11	11	14
Systems software maintenance	12	12	16
Problem management	14	14	20
Change management	8	11	14
Configuration management	12	13	15
System availability management	10	10	15
Performance management	19	21	22
Capacity planning	19	20	21
Storage management	11	12	13
Systems security management	11	14	15
Operations automation	19	21	25
System workload consolidation	16	17	20

Sample = 42



Likelihood to Engage Outside Firms for Consulting and Education MVS/VM Dominant Architecture

	Sample		Users of Outside Services	
	Any Supplier	IBM as Supplier	Any Supplier	IBM as Supplier
Organizational Consulting	2.0	2.1	2.3	2.3
Systems Operational Assessments	2.0	2.0	2.3	2.4
Educational Services	3.6	3.0	3.5	3.1

Sample = 37

Sample = 23



Operational Management Services MVS/VM Dominant Architecture

General Types of Services	Number Mentioned	Would Go Outside (%)
Tuning systems performance	15	47
Updating to new systems	6	24
Installing new systems software	6	24
Simplifying operations	6	33
Verifying current environmental capabilities	2	50
Improving systems availability	2	50

Sample = 37



Interest in Specific Services MVS/VM Dominant Architecture

Service Area	Mean Interest		
	Planning	Implementation	IBM as Provider
Installation of systems software	1.5	1.5	1.4
Systems software maintenance	1.4	1.4	1.5
Problem management	1.6	1.6	1.5
Change management	1.4	1.5	1.4
Configuration management	1.6	1.6	1.5
System availability management	1.5	1.5	1.5
Performance management	2.1	2.1	1.9
Capacity planning	2.2	2.3	1.9
Storage management	1.5	1.6	1.5
Systems security management	1.5	1.5	1.5
Operations automation	1.8	1.9	2.0
System workload consolidation	1.7	1.7	1.9

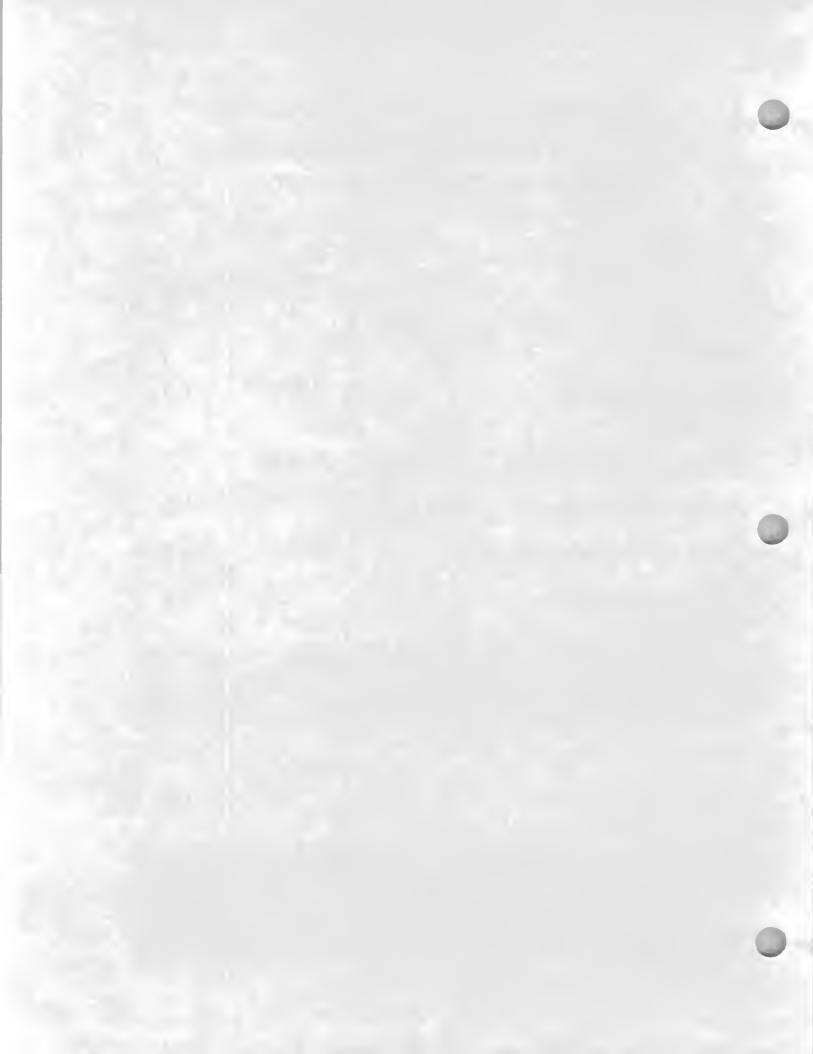
Sample = 39

Rating—1 to 5: 1 = Very Unlikely, 5 = Very Likely

Interest in Specific Services MVS/VM Dominant Architecture Users of Outside Services

Service Area	Mean Interest		
	Planning	Implementation	IBM as Provider
Installation of systems software	1.8	1.8	1.7
Systems software maintenance	1.6	1.7	1.8
Problem management	1.8	1.8	1.7
Change management	1.6	1.7	1.5
Configuration management	1.9	2.0	1.8
System availability management	1.8	1.8	1.8
Performance management	2.7	2.7	2.3
Capacity planning	2.7	2.8	2.3
Storage management	1.9	2.0	1.8
Systems security management	1.8	1.8	1.8
Operations automation	2.3	2.4	2.5
System workload consolidation	2.1	2.1	2.4

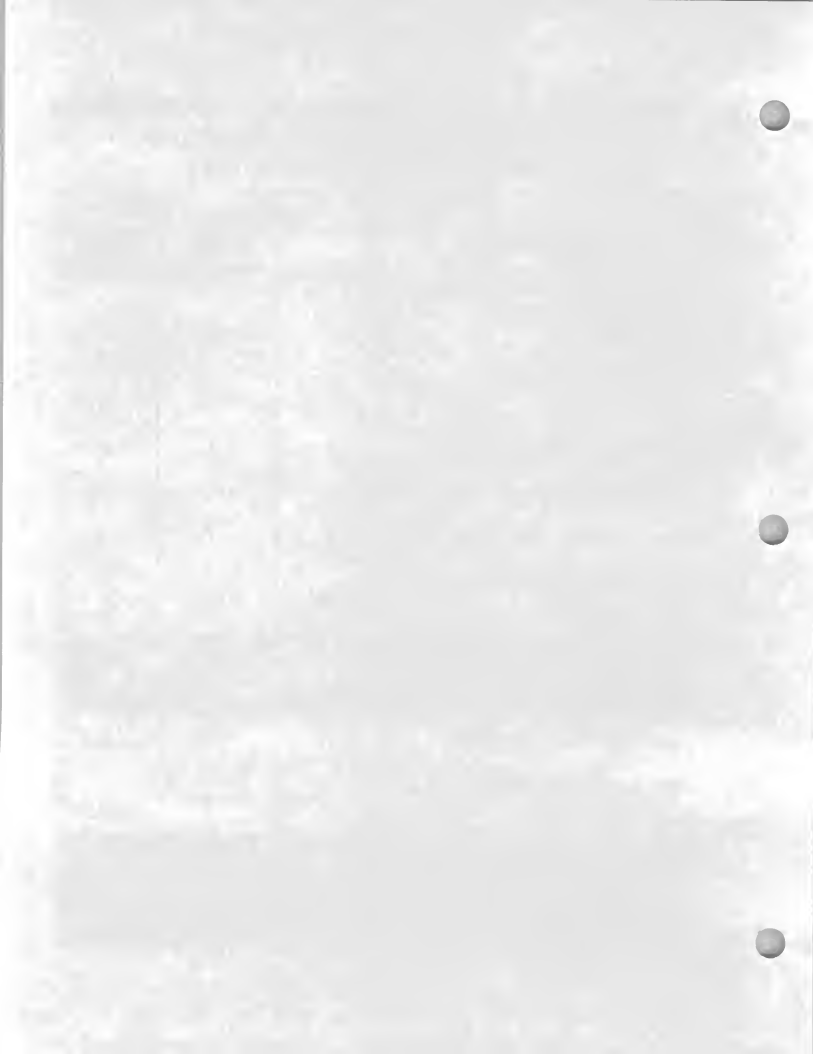
Rating—1 to 5: 1 = Very Unlikely, 5 = Very Likely



Interest in Outside Help for Support Services MVS/VM Dominant Architecture Users of Outside Services

Service Area	Frequency of 3/4/5		
	Planning	Imple- mentation	IBM as Provider
Installing systems software	6	6	5
Systems software maintenance	4	5	6
Problem management	6	6	6
Change management	3	5	3
Configuration management	5	6	5
System availability management	6	6	5
Performance management	12	13	10
Capacity planning	14	16	11
Storage management	7	8	5
Systems security management	6	7	6
Operations automation	11	11	12
System workload consolidation	9	9	11

Sample = 37



Interest in Outside Help for Support Services MVS/VM Dominant Architecture Providers of IS

Service Area	Mean Interest		
	Planning	Imple- mentation	IBM as Provider
Installing systems software	1.6	1.6	1.6
Systems software maintenance	1.6	1.6	1.6
Problem management	1.5	1.5	1.5
Change management	1.4	1.4	1.4
Configuration management	1.6	1.7	1.6
System availability management	1.5	1.5	1.6
Performance management	2.1	2.1	2.0
Capacity planning	2.2	2.4	2.2
Storage management	1.6	1.7	1.6
Systems security management	1.7	1.7	1.6
Operations automation	2.0	2.1	2.2
System workload consolidation	1.7	1.7	2.0

Sample = 25



Interest in Outside Help for Support Services MVS/VM Dominant Architecture Users of Outside Services—Providers of IS

Service Area	Mean Interest		
	Planning	Implementation	IBM as Provider
Installing systems software	1.8	1.8	1.9
Systems software maintenance	1.8	1.8	1.9
Problem management	1.7	1.7	1.7
Change management	1.5	1.6	1.5
Configuration management	1.9	2.0	1.8
System availability management	1.7	1.7	1.8
Performance management	2.6	2.6	2.3
Capacity planning	2.7	2.8	2.6
Storage management	1.8	2.0	1.8
Systems security management	1.9	1.9	1.8
Operations automation	2.4	2.6	2.6
System workload consolidation	2.0	2.0	2.5

Sample = 18



Interest in Outside Help for Support Services MVS/VM Dominant Architecture Users of Outside Services—Providers of IS

Service Area	Frequency of 3/4/5		
	Planning	Imple- mentation	IBM as Provider
Installing systems software	5	5	5
Systems software maintenance	4	4	5
Problem management	3	3	4
Change management	1	2	2
Configuration management	4	5	4
System availability management	4	4	4
Performance management	10	10	8
Capacity planning	10	11	9
Storage management	6	7	4
Systems security management	5	6	5
Operations automation	9	10	9
System workload consolidation	7	7	8

Sample = 18



Likelihood to Engage Outside Firms for Consulting and Education VSE Dominant Architecture

	Sample		Users of Outside Services	
	Any Supplier	IBM as Supplier	Any Supplier	IBM as Supplier
Organizational Consulting	2.2	2.1	1.8	2.4
Systems Operational Assessments	2.3	2.2	2.0	2.6
Educational Services	3.6	3.6	3.8	3.6

Sample = 10

Sample = 5



Operational Management Services VSE Dominant Architecture

General Types of Services	Number Mentioned	Would Go Outside (%)
Tuning systems performance	4	25
Updating to new systems	1	100
Installing new systems software	2	50
Simplifying operations	1	0
Verifying current environmental capabilities	-	-
Improving systems availability	-	-

Sample = 10

Interest in Outside Help for Support Services VSE Dominant Architecture

Service Area	Mean Interest		
	Planning	Imple- mentation	IBM as Provider
Installing systems software	2.0	1.8	1.9
Systems software maintenance	1.9	1.7	2.0
Problem management	2.2	2.0	2.2
Change management	2.0	1.8	2.3
Configuration management	2.0	1.8	2.3
System availability management	2.1	1.9	2.2
Performance management	2.6	2.4	2.7
Capacity planning	2.3	1.9	2.2
Storage management	2.1	1.9	2.2
Systems security management	2.3	2.1	2.4
Operations automation	2.8	2.6	2.5
System workload consolidation	2.7	2.5	2.7

Sample = 10



Interest in Outside Help for Support Services VSE Dominant Architecture Users of Outside Services

Service Area	Mean Interest		
	Planning	Imple- mentation	IBM as Provider
Installing systems software	2.2	2.2	2.2
Systems software maintenance	2.0	2.0	2.4
Problem management	2.0	2.0	2.4
Change management	2.0	2.0	2.4
Configuration management	2.0	2.0	2.4
System availability management	2.0	2.0	2.4
Performance management	2.4	2.4	2.6
Capacity planning	2.0	2.0	2.4
Storage management	2.0	2.0	2.4
Systems security management	2.4	2.4	3.0
Operations automation	2.6	2.6	3.0
System workload consolidation	2.8	2.8	3.2

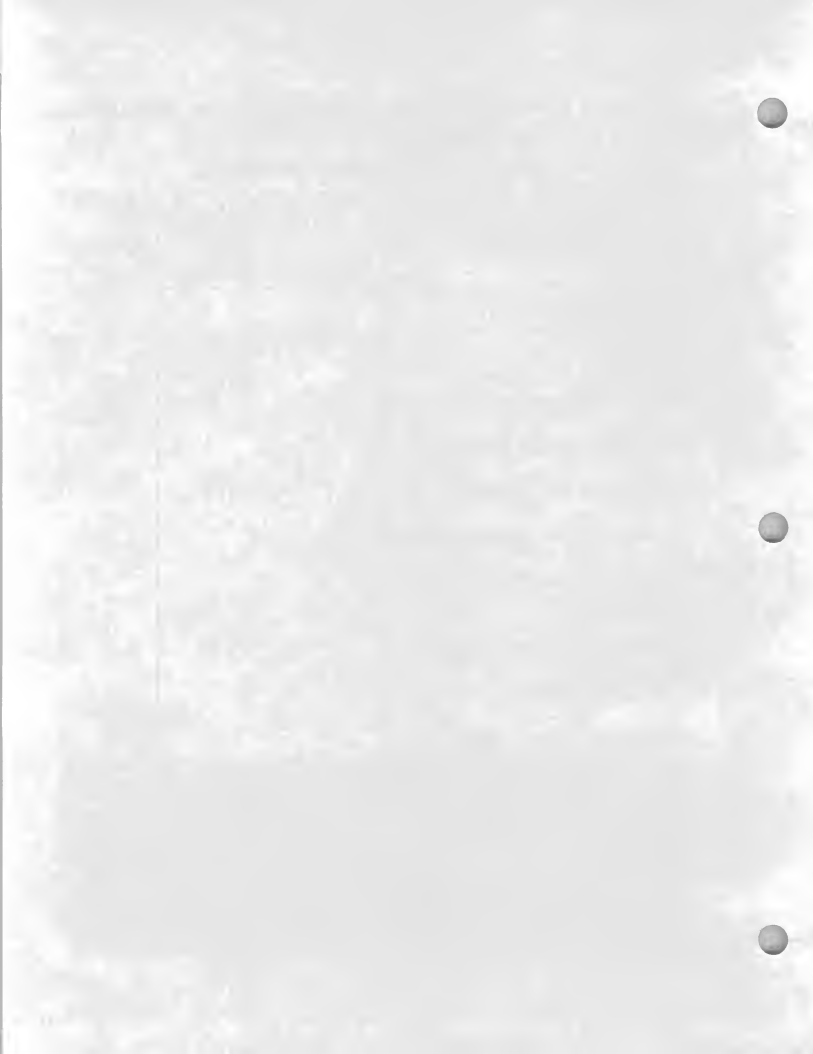
Sample = 5



Interest in Outside Help for Support Services VSE Dominant Architecture Users of Outside Services

Service Area	Frequency of 3/4/5		
	Planning	Implementation	IBM as Provider
Installing systems software	2	2	2
Systems software maintenance	1	1	2
Problem management	1	1	2
Change management	1	1	2
Configuration management	1	1	2
System availability management	1	1	2
Performance management	2	2	2
Capacity planning	1	1	2
Storage management	1	1	2
Systems security management	2	2	3
Operations automation	2	2	3
System workload consolidation	3	3	3

Sample = 5



Interest in Outside Help for Support Services VSE Dominant Architecture Providers of IS

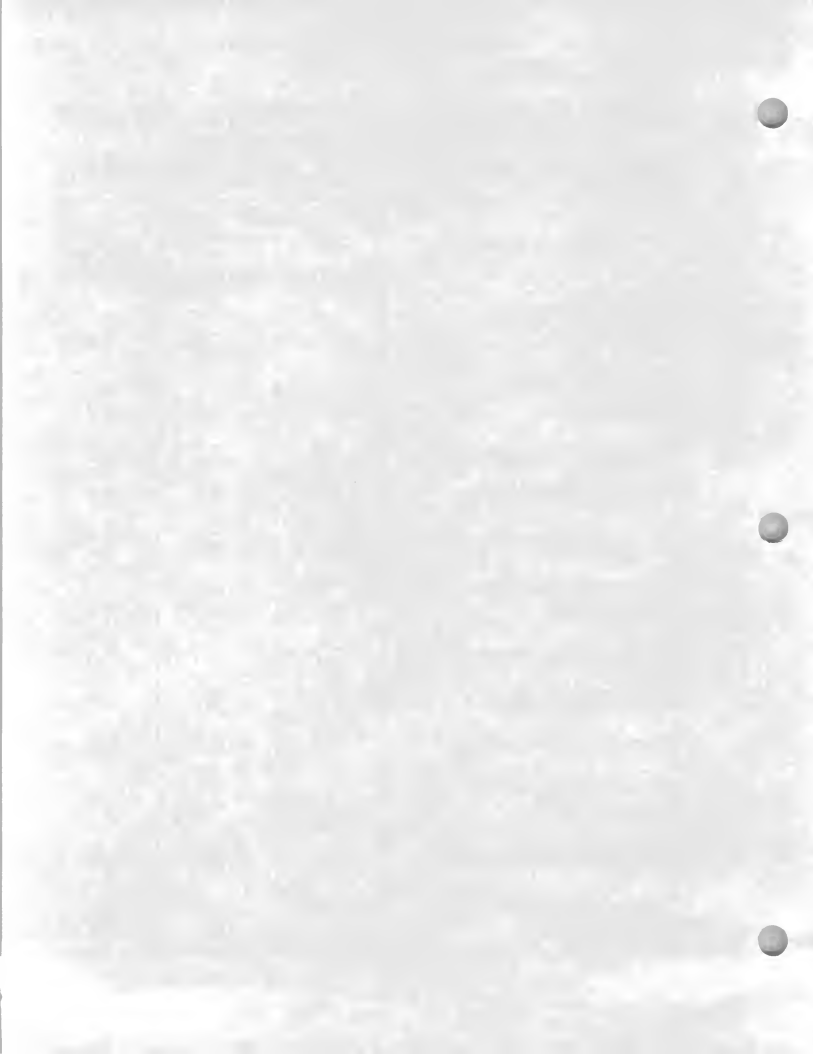
Service Area	Mean Interest		
	Planning	Imple- mentation	IBM as Provider
Installing systems software	2.4	2.1	2.3
Systems software maintenance	2.3	2.0	2.4
Problem management	2.4	2.1	2.4
Change management	2.4	2.1	2.6
Configuration management	2.4	2.1	2.4
System availability management	2.6	2.3	2.6
Performance management	3.0	2.7	3.0
Capacity planning	2.9	2.3	2.7
Storage management	2.6	2.3	2.7
Systems security management	2.6	2.3	2.6
Operations automation	2.7	2.4	2.7
System workload consolidation	2.9	2.6	2.9

Sample = 7

Interest in Outside Help for Support Services VSE Dominant Architecture Users of Outside Services—Providers of IS

Service Area	Mean Interest		
	Planning	Imple- mentation	IBM as Provider
Installing systems software	3.0	3.0	3.0
Systems software maintenance	2.7	2.7	3.3
Problem management	2.7	2.7	3.3
Change management	2.7	2.7	3.3
Configuration management	2.7	2.7	3.3
System availability management	2.7	2.7	3.3
Performance management	2.7	2.7	3.3
Capacity planning	2.7	2.7	3.3
Storage management	2.7	2.7	3.3
Systems security management	2.7	2.7	3.3
Operations automation	2.7	2.7	3.3
System workload consolidation	2.7	2.7	3.3

Sample = 3



Interest in Outside Help for Support Services VSE Dominant Architecture Users of Outside Services—Providers of IS

Service Area	Frequency of 3/4/5		
	Planning	Imple- mentation	IBM as Provider
Installing systems software	2	2	2
Systems software maintenance	1	1	2
Problem management	1	1	2
Change management	1	1	2
Configuration management	1	1	2
System availability management	1	1	2
Performance management	1	1	2
Capacity planning	1	1	2
Storage management	1	1	2
Systems security management	1	1	2
Operations automation	1	1	2
System workload consolidation	1	1	2

Sample = 3



Likelihood to Engage Outside Firms for Consulting and Education AS/400 Dominant Architecture

	Sample		Users of Outside Services	
	Any Supplier	IBM as Supplier	Any Supplier	IBM as Supplier
Organizational Consulting	1.8	2.2	2.1	2.7
Systems Operational Assessments	2.7	2.6	3.1	3.1
Educational Services	3.6	3.5	3.7	3.8

Sample = 21

Sample = 14



Operational Management Services AS/400 Dominant Architecture

General Types of Services	Number Mentioned	Would Go Outside (%)
Tuning systems performance	7	71
Updating to new systems	3	67
Installing new systems software	3	67
Simplifying operations	3	67
Verifying current environmental capabilities	4	50
Improving systems availability	-	-

Sample = 21

Interest in Outside Help for Support Services AS/400 Dominant Architecture

Service Area	Mean Interest		
	Planning	Imple- mentation	IBM as Provider
Installing systems software	1.8	1.8	2.2
Systems software maintenance	2.3	2.2	2.5
Problem management	2.6	2.6	2.8
Change management	2.2	2.2	2.5
Configuration management	2.5	2.4	2.4
System availability management	2.0	2.1	2.4
Performance management	2.4	2.4	2.6
Capacity planning	2.3	2.3	2.3
Storage management	1.9	1.9	2.0
Systems security management	2.0	2.1	2.1
Operations automation	2.2	2.3	2.4
System workload consolidation	1.9	2.0	2.0

Sample = 21

Interest in Outside Help for Support Services AS/400 Dominant Architecture Users of Outside Services

Service Area	Mean Interest		
	Planning	Imple- mentation	IBM as Provider
Installing systems software	1.9	1.9	2.5
Systems software maintenance	2.6	2.6	2.9
Problem management	2.9	2.9	3.4
Change management	2.4	2.4	3.1
Configuration management	2.6	2.6	2.9
System availability management	2.0	2.1	2.9
Performance management	2.5	2.5	3.1
Capacity planning	2.4	2.4	2.8
Storage management	1.9	1.9	2.4
Systems security management	2.0	2.1	2.5
Operations automation	2.4	2.5	3.1
System workload consolidation	1.9	2.0	2.4

Sample = 14



Interest in Outside Help for Support Services AS/400 Dominant Architecture Users of Outside Services

Service Area	Frequency of 3/4/5		
	Planning	Imple- mentation	IBM as Provider
Installing systems software	3	4	7
Systems software maintenance	7	6	8
Problem management	7	7	12
Change management	5	5	9
Configuration management	6	6	8
System availability management	3	3	8
Performance management	5	6	10
Capacity planning	5	5	9
Storage management	3	3	6
Systems security management	3	5	6
Operations automation	6	8	10
System workload consolidation	4	5	6

Sample = 14

Interest in Outside Help for Support Services AS/400 Dominant Architecture Providers of IS

Service Area	Mean Interest		
	Planning	Imple- mentation	IBM as Provider
Installing systems software	1.9	1.9	2.3
Systems software maintenance	2.3	2.3	2.4
Problem management	2.6	2.6	2.7
Change management	1.9	2.0	2.3
Configuration management	2.6	2.5	2.2
System availability management	2.3	2.4	2.2
Performance management	2.9	2.9	2.6
Capacity planning	2.7	2.7	2.4
Storage management	2.2	2.2	1.9
Systems security management	2.1	2.2	2.1
Operations automation	2.3	2.4	2.2
System workload consolidation	2.2	2.3	2.0

Sample = 15

Interest in Outside Help for Support Services AS/400 Dominant Architecture Users of Outside Services—Providers of IS

Service Area	Mean Interest		
	Planning	Imple- mentation	IBM as Provider
Installing systems software	1.9	1.9	2.5
Systems software maintenance	2.6	2.5	2.7
Problem management	2.7	2.7	3.2
Change management	1.9	2.0	2.8
Configuration management	2.6	2.5	2.7
System availability management	2.2	2.4	2.6
Performance management	2.9	2.9	3.0
Capacity planning	2.8	2.9	3.0
Storage management	2.1	2.1	2.3
Systems security management	2.0	2.2	2.4
Operations automation	2.4	2.6	2.7
System workload consolidation	2.1	2.2	2.4

Sample = 10

Interest in Outside Help for Support Services AS/400 Dominant Architecture Users of Outside Services—Providers of IS

Service Area	Frequency of 3/4/5		
	Planning	Implementation	IBM as Provider
Installing systems software	2	2	5
Systems software maintenance	5	4	5
Problem management	4	4	8
Change management	2	2	5
Configuration management	4	4	5
System availability management	3	3	5
Performance management	5	6	7
Capacity planning	5	5	7
Storage management	3	3	4
Systems security management	2	4	4
Operations automation	4	6	6
System workload consolidation	3	4	4

Sample = 10

Likelihood to Engage Outside Firms for Consulting and Education “Other” Dominant Architecture

	Sample		Users of Outside Services	
	Any Supplier	IBM as Supplier	Any Supplier	IBM as Supplier
Organizational Consulting	2.0	2.3	2.1	2.3
Systems Operational Assessments	2.2	2.4	2.3	2.3
Educational Services	3.1	2.9	2.7	2.8

Sample = 12



Operational Management Services “Other” Dominant Architecture

General Types of Services	Number Mentioned	Would Go Outside (%)
Tuning systems performance	4	25
Updating to new systems	1	100
Installing new systems software	-	-
Simplifying operations	2	50
Verifying current environmental capabilities	-	-
Improving systems availability	2	0

Sample = 12

Interest in Outside Help for Support Services "Other" Dominant Architecture

Service Area	Mean Interest		
	Planning	Imple- mentation	IBM as Provider
Installation of systems software	1.8	1.8	1.6
Systems software maintenance	2.2	2.5	1.9
Problem management	2.0	2.0	2.1
Change management	2.3	2.3	2.1
Configuration management	2.2	2.2	1.9
System availability management	2.1	2.1	2.1
Performance management	1.9	2.3	2.3
Capacity planning	2.2	2.5	2.1
Storage management	2.1	2.4	2.3
Systems security management	1.8	1.8	1.9
Operations automation	1.9	1.9	1.8
System workload consolidation	2.1	2.1	1.9

Sample = 12



Interest in Outside Help for Support Services “Other” Dominant Architecture Users of Outside Services

Service Area	Mean Interest		
	Planning	Implementation	IBM as Provider
Installation of systems software	2.3	2.3	1.6
Systems software maintenance	3.0	3.6	2.1
Problem management	2.4	2.4	2.1
Change management	3.0	3.0	2.3
Configuration management	3.0	3.0	2.1
System availability management	2.9	2.9	2.4
Performance management	2.1	2.7	2.3
Capacity planning	2.6	3.1	2.0
Storage management	2.9	3.4	2.7
Systems security management	2.3	2.3	2.1
Operations automation	2.4	2.4	1.7
System workload consolidation	2.9	2.9	2.1

Sample = 7

Interest in Outside Help for Support Services “Other” Dominant Architecture Users of Outside Services

Service Area	Frequency of 3/4/5		
	Planning	Imple- mentation	IBM as Provider
Installation of systems software	3	3	2
Systems software maintenance	4	5	3
Problem management	4	4	3
Change management	5	5	4
Configuration management	5	5	4
System availability management	4	4	4
Performance management	3	4	4
Capacity planning	5	2	2
Storage management	4	5	4
Systems security management	3	3	3
Operations automation	3	3	2
System workload consolidation	5	5	3

Sample = 7

Interest in Outside Help for Support Services “Other” Dominant Architecture Users of Outside Services—Providers of IS

Service Area	Mean Interest		
	Planning	Imple- mentation	IBM as Provider
Installation of systems software	1.7	1.7	1.0
Systems software maintenance	2.0	3.3	2.3
Problem management	1.7	1.7	2.0
Change management	2.7	2.7	2.0
Configuration management	3.0	3.0	1.7
System availability management	2.7	2.7	2.0
Performance management	1.3	2.7	2.0
Capacity planning	1.7	3.0	1.3
Storage management	2.0	3.3	2.3
Systems security management	3.0	3.0	2.0
Operations automation	2.3	2.3	1.0
System workload consolidation	3.0	3.0	2.0

Sample = 3

Interest in Outside Help for Support Services “Other” Dominant Architecture Providers of IS

Service Area	Mean Interest		
	Planning	Imple- mentation	IBM as Provider
Installation of systems software	1.5	1.5	1.0
Systems software maintenance	1.8	2.8	2.0
Problem management	2.0	2.0	2.3
Change management	2.5	2.5	2.0
Configuration management	2.5	2.5	1.5
System availability management	2.3	2.3	1.8
Performance management	2.0	3.0	2.5
Capacity planning	2.3	3.3	2.0
Storage management	1.8	2.8	2.0
Systems security management	2.5	2.5	1.8
Operations automation	2.3	2.3	1.5
System workload consolidation	2.5	2.5	1.8

Sample = 4

Interest in Outside Help for Support Services “Other” Dominant Architecture Users of Outside Services—Providers of IS

Service Area	Frequency of 3/4/5		
	Planning	Implementation	IBM as Provider
Installation of systems software	1	1	-
Systems software maintenance	1	2	1
Problem management	-	-	1
Change management	1	1	1
Configuration management	2	2	1
System availability management	1	1	1
Performance management	-	1	1
Capacity planning	1	2	-
Storage management	1	2	1
Systems security management	2	2	1
Operations automation	1	1	-
System workload consolidation	2	2	1

Sample = 3



Specific Services—Comments Total Sample

	Mentions
Most work done exclusively in-house	38
Would consider IBM	12
Good products/company IBM	9
IBM too expensive	6
IBM not responsive/Box concentration	4

Sample = 80

Multiple responses allowed

Specific Services—Comments Users of Outside Services

	Mentions
Would consider IBM	10
Good products/company IBM	4
IBM too expensive	3
IBM not responsive/Box concentration	2

Sample = 50

Multiple responses allowed

Technology Deployment Total Sample

Technology	Number of Mentions	Average Interest	
		Planning	Implementation
Client/Server	45	3.1	3.1
Image-based application	15	2.6	2.7
Optical fiber	10	4.1	4.0

Sample = 80

Technology Deployment Users of Outside Services

Technology	Number of Mentions	Average Interest	
		Planning	Implemen- tation
Client/Server	28	3.4	3.4
Image-based application	8	3.4	3.6
Optical fiber	9	4.2	4.1

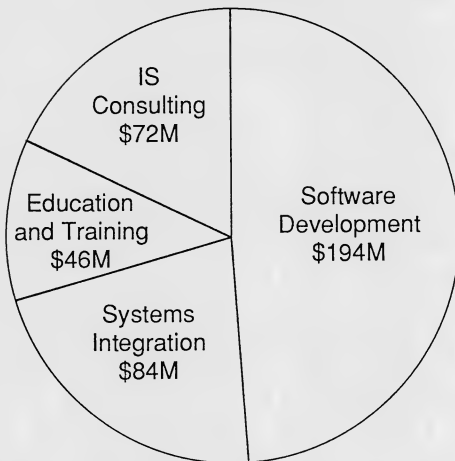
Sample = 50

Technology Deployment Other Technologies

- Networking—LAN and PC (4 mentions)
- Distributed processing
- New CASE tools
- Lights-out operation
- Capacity planning
- Voice recognition

Bay Trading Area Total Professional Services

1992 = \$396M



- Systems operations support services not included

Bay Trading Area Professional Services Expenditures 1992

	Bay Trading Area (\$M)	Technical Support Prof. Svcs. (\$M)	IBM Related (\$M)	IBM Specific Support Services (\$M)
IS Consulting	72	11	5	?
Software Development	194	10	6	?
Education and Training	46	11	6	N/A
Systems Integration	84	5	2	?
Total	396	37	19	?

- Growth rates driven by computer equipment sales and willingness to shift to external expenditures.

VI. Recommendations

- Present offerings as consulting service as opposed to specific projects or tasks
- Bundle specific services into solution sets for marketing purposes. For example:

Tuning systems performance =

- Configuration management +
- Performance management +
- Capacity management +
- Storage management
- Position offerings as operations management-based services—not technically based. Implications:
 - Marketing collateral
 - Relationship sell—account management
 - “Program” approach

- Focus for specific services on the following:
 - Performance management
 - Capacity planning
 - Operations automation
 - System workload consolidation
- Develop different approaches for MVS and AS/400 markets
- Package a complete set of services around client/server technology deployment



User Questionnaire—YRSF2, Area 11 Opportunity Analysis

CONFIDENTIAL

IBM is trying to identify user needs for specific classes of technical support services related to the management and maintenance of in-house information systems environments. To help assess these needs the IBM Bay Trading Area has engaged INPUT, an independent research firm, to survey potential users of these services in order to find out how to allocate its resources to best service existing and potential customers. This survey is not being conducted to generate specific leads. All responses to the survey will be considered confidential, and the responses of individual respondent firms will not be disclosed to IBM. In appreciation of your willingness to participate, INPUT will be sending you a synopsis of the survey results.

Interviewer Note: *Use standard cover sheet to gather information on firm's revenues, respondent's name and title, address, and industry classification.*

DEMOGRAPHICS

1.1 Within your firm are you primarily a user of information systems or a provider?

- ☐ User
☐ Provider

1.2 Please describe your function.



DESCRIPTION OF INFORMATION REQUIRED

For each class of service we are trying to obtain a quick evaluation of:

- Your tendency to look outside for a supplier of this service;
- Why you might look to an outside supplier for the service;
- And, whether or not you would consider IBM as a provider of the service.

In general the types of services being covered include:

- Installation of new systems software
- Updating to new releases of systems software
- Tuning systems performance
- Improving systems availability
- Simplifying operations
- Verifying that the current environment can handle new applications

OPERATIONAL MANAGEMENT SERVICES

Of the kinds of services mentioned above, where do you believe that you might have the greatest need? And would you go outside? (*Check Box*)

2.0	_____	[]
2.1	_____	[]
2.2	_____	[]

We would also like your opinions on several specific service areas; your interest in going outside for support with regard to either planning or implementation, and the degree to which you consider IBM a viable supplier of the service for planning or implementation activities where:

- **PLAN**ning includes Analysis, Design or Related Development Activity
- **IM**plementation includes, Installation Testing and Activating the Necessary Tools

For each class of service please give us your opinion of how likely you would be to look outside for the service on a scale of 1 - 5, with 1 being very unlikely and five being very likely. Also using the same 1 - 5 scale, please provide an indication of how likely you would be to engage IBM for either planning or implementation of the service.

	SERVICE AREA	X.1 PLN	X.2 IMP	X.3 IBM	X.4 REASON
3.X	Installation of Sys. Software				
4.X	Systems Software Maint.				
5.X	Problem Management				
6.X	Change Management				
7.X	Configuration Mgt.				
8.X	Systems Availability Mgt.				
9.X	Performance Management				
10.X	Capacity Planning				
11.X	Storage Management				
12.X	Systems Security Mgt.				
13.X	Operations Automation				
14.X	Sys. Workload Consolidation				

TECHNOLOGY DEPLOYMENT

We are also interested in the types of technology that you feel must be explored or implemented by your organization over the next several years. Examples might include: image-based applications, client/server architectures, optical fiber connections or lights-out data center operations. Please indicate which technologies (not limited to the examples) that you feel are important, and whether you might be looking outside for services to support their planning and/or installation. We will use the 1 - 5 scale to rate your interest in going outside for service support, with 1 indicating little or no interest and 5 indicating a high degree of interest.

X.1 TECHNOLOGY	X.2 PLN	X.3 IMP
15.X		
16.X		
17.X		
18.X		
19.X		



CONSULTING AND EDUCATION

Using a scale of 1 - 5, with five being most likely, how likely is it that you would engage an outside firm for the following types of consulting and educational services. Also, please rate on the same scale your evaluation of how likely it is that you would consider IBM as a key potential supplier of the services.

- 20.1 *Organizational Consulting* - Providing the customer with consultation on organization, staffing, skills, and resource utilization to support the technical support function.

_____ (1 - 5)

- 20.2 _____ IBM as a supplier (1 - 5)

- 20.3 *Systems Operational Assessments* - Assessment of the customer's systems management processes, tools and organization to evaluate effectiveness in managing the infrastructure.

_____ (1 - 5)

- 20.4 _____ IBM as a supplier (1 - 5)

- 20.5 *Educational Services* - Services encompassing the traditional technical skills and the additional skills required to transform the technical support organization.

_____ (1 - 5)

- 20.6 _____ IBM as a supplier (1 - 5)

BUDGET AND OTHER INFORMATION

- 21.0 Approximately what is your firm's overall annual budget for information systems?
_____ (000s)

- 21.1 Do you currently outsource all or part of your data processing operations to an outside firm?
_____ Y/N

- 21.3 If so, with whom? _____

- 21.4 Please estimate what percentage of the firm's (institution's) total annual budget for information systems is spent on outside services such as those discussed in this interview.
_____ %

21.5 Could you please indicate which of the following IBM architectures (as indicated by operating systems type) are currently installed in your firm.

21.6 ☐ MVS

21.7 ☐ VM

21.8 ☐ VSE

21.9 ☐ AS/400

30.0 ☐ Other: _____

31.0 Which of these do you feel is the dominant architecture?

CLOSING

"Thank you for participating in our survey. We will be sending you the synopsis of the survey that we discussed at the opening of the interview within two months. If you have any additional questions regarding INPUT, its products or services, please feel free to contact us at our Mountain View office at 415-961-3300."

About INPUT

INPUT is a worldwide consulting and market research firm uniquely focused on the information technology services and software markets. Executives in many technically advanced companies in North America, Europe, and Japan rely on INPUT for data, objective analysis, and insightful opinions to support their business plans, market assessments, and technology directions. By leveraging INPUT's considerable knowledge and expertise, clients make informed decisions more quickly, and benefit by saving on the cost of internal research.

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